



Attorney Docket No. _____

Patent
032796-019

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

John P. CARULLI et al.

Application No.: 09/578,900

Filing Date: May 26, 2000

Title: HIGH BONE MASS GENE OF 11q13.3

Group Art Unit: 1635

Examiner: Jon E. Angell

Confirmation No.: 8399

FIFTH
INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTERCommissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a FIFTH Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☐ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☒ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge _____ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of _____ is enclosed for the fee due.
- ☐ Charge _____ to credit card. Form PTO-2038 is attached.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By


Mercedes K. Meyer

Registration No. 44,939

Date: October 4, 2004



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In re Patent Application of)	
John P. CARULLI et al.)	Group Art Unit: 1635
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For: HIGH BONE MASS GENE OF)	
11Q13.3)	

FIFTH INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

The documents are being submitted after the close of prosecution but prior to, or concurrently with, the payment of the issue fee, therefore under 37 C.F.R. § 1.97(d) a statement and the fee set forth in 37 C.F.R. § 1.17(p) are enclosed.

I, the undersigned, hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement. The enclosed search report was mailed August 10, 2004.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date October 4, 2004

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FIFTH OCT 04 2004

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

Application Number 09/578,900
 Filing Date May 26, 2000
 First Named Inventor John P. CARULLI et al.
 Examiner Name Jon E. Angell
 Attorney Docket Number 032796-019

U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)

FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	STATUS						
					Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	Gong et al., "LDL Receptor-Related Protein 5 (LRP5) Affects Bone Accrual and Eye Development," Cell 107, pp. 513-523, Cell Press, Cambridge, Massachusetts, 2001.
	Magoori et al., "Severe Hypercholesterolemia, Impaired Fat Tolerance, and Advanced Atherosclerosis in Mice Lacking Both Low Density Lipoprotein Receptor-related Protein 5 and Apolipoprotein E*," The Journal of Biological Chemistry 278(13) pp. 11331-11336, The American Society for Biochemistry and Molecular Biology, Inc., Baltimore, Maryland, 2003.
	Boyden et al., "HIGH BONE DENSITY DUE TO A MUTATION IN LDL-RECEPTOR-RELATED PROTEIN 5," The New England Journal of Medicine 346(20), pp. 1513-1521, Massachusetts Medical, Boston, Massachusetts, 2002.
	Van Wesenbeeck et al., "Six Novel Missense Mutations in the LDL Receptor-Related Protein 5 (LRP5) Gene in Different Conditions with an Increased Bone Density," Am. J. Human. Genet., 72, pp. 763-771, The University of Chicago Press, Chicago, Illinois, 2003.
	Little et al., "A Mutation in the LDL Receptor-Related Protein 5 Gene Results in the Autosomal Dominant High-Bone-Mass Trait," Am. J. Hum. Genet., 70, pp. 11-19, The University of Chicago Press, Chicago, Illinois, 2002.
	Babji et al., "High Bone Mass in Mice Expressing a Mutant LRP5 Gene," Journal of Bone and Mineral Research, 18, pp. 960-974, Mary Ann Liebert, New York, 2003.
	Mizuguchi et al., "LRP5, low-density-lipoprotein-receptor-related protein 5, is a determinant for bone mineral density," J. Hum. Genet. 49, pp. 80-86, Springer Verlag, Tokyo, Japan, 2004.
	International Search Report dated August 10, 2004.

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.